School Garden and Plant-Based Education Resources



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Main Ideas to Remember:

1. Start small (think Dixie cup under lightbulb or on window sill).

2. You do not need to be a master gardener, or know anything about gardening, to start.

3. What is the <u>main</u> reason you want to incorporate gardening? Is it to learn about plants, food sources, culture? Keep that reason in mind as you decide which direction to take. You'll get information overload otherwise. You can't do it all-pick <u>one</u> angle!

4. Use a garden/plant theme to teach your <u>regular</u> curriculum. Measure plant growth instead of a line on a piece of paper, classify seeds instead of toys, etc. <u>Incorporate</u> plants; don't add another unit!

5. Don't start <u>your</u> own garden. Let the kids plan it, make it, tend it, eat it. If they don't do the work, they won't have any buy-in. It does not have to look perfect—it has to look used.

6. No land/all concrete/no time—got buckets? Put them along the side of the building. The kids can tend to them at recess or before/after school. They will <u>want</u> to do this!

Gardening programs with registration, curriculum, certification, etc.:

<u>Junior Master Gardener program</u> – Set of curricula for grades 3-5 and 6-8 that integrate gardening activities into math, science, reading, language arts, social studies, art, music, physical education, etc. Curricula below can be ordered through Texas A&M bookstore (link on JMG page); registration of groups is free: <u>www.jmgkids.us</u>

Wildlife Gardener - needs and habitat of likely garden visitors (birds, reptiles, etc.)

Literature in the Garden – activities to go along with 6 children's books about plants/gardening (*Plantzilla*, *Miss Rumphius*, etc.)

Health and Nutrition from the Garden - thrifty gardens, food safety, nutrition

JMG Level 1 Handbook (the 'basic' curriculum)- plant anatomy, soils, water, 'bugs', ecology, etc.

Operation W.A.T.E.R.: Dr. Thistle Goes Underground (soils and water - grades 6-8)

Operation Thistle: Seeds of Despair (plant growth and development – grades 6-8)

Learn, Grow, Eat & Go! -- 10-week unit incorporating nutrition, garden science, physical activity, food preparation, and fresh vegetable tastings

<u>National Junior Horticultural Association</u> – online study manuals for horticulture ID and judging contests have information on plant nutrition, plant propagation, vegetables, greenhouse structures, etc. <u>www.njha.org</u>

Valuable websites:

Gardening with Children: Resources to Encourage Kids to Plant https://www.buyrope.co.uk/kids-gardening/

<u>Guide to Gardening with Children</u> including links to gardening ideas for children with special needs, creating a butterfly garden, introduction to children's vegetable gardens, etc. <u>https://www.avasflowers.net/guide-to-gardening-with-children</u>

<u>National Gardening Association's Kids Gardening</u>: Classroom Activities; Grants; School Greenhouse Guide; School Garden Registry; Professional Development; FAQ's on Integrating Gardening into the Curriculum, Planning a Garden, Choosing Plants, Sustaining Children's Interest, Indoor Gardening: <u>http://www.kidsgardening.org/</u>

Oklahoma Ag in the Classroom - activities K-8 on agricultural literacy: https://www.agclassroom.org/ok/

<u>Planning Your School Garden Program</u> – help with planning, starting and sustaining your school garden program <u>http://www.csgn.org/content/planning-your-school-garden-program-0</u> January 2021

Linking Gardens to School Curriculum ideas for integrating gardens with classroom curriculum https://www.csgn.org/sites/default/files/GFL_3.pdf

<u>Cornell Garden-Based Learning</u> – activities; projects; downloadable (free) publications on apples, potatoes, peanuts, rice, beginning gardening, community gardening, 3 sisters gardens, youth crop marketing, growing vegetables for fair exhibits; links to gardening resources <u>http://gardening.cals.cornell.edu/lessons/</u>

<u>Youth Farm Stand Toolkit</u> –free handbook with lessons, material lists, and tips on starting a garden-to-market program with youth; includes lesson plans on nutrition, gardening, business planning, and marketing; materials lists, tips, ideas; <u>https://www.canr.msu.edu/foodsystems/uploads/files/youth-farm-stand-toolkit.pdf</u>

<u>OSU Department of Horticulture and Landscape Architecture</u> – links to 4H horticulture judging contests, curriculum on spices with lessons and links to resources, application for high school summer academy "Camp T.U.R.F. (Tomorrow's Undergraduates Realizing the Future), links to extension fact sheets, contact information for specialists in different horticultural areas, professional development opportunities/workshops: <u>www.hortla.okstate.edu</u>

<u>Creating "Gardens of Goodness"</u> –provides detailed advice for designing, creating, and maintaining five types of educational gardens: windowsill gardens; vertical gardens; raised beds and container gardens; cold frames, tunnels, and greenhouses; and large-scale gardens <u>http://www.ecoliteracy.org/downloads/creating-gardens-goodness</u>

<u>Got Dirt</u>? – easy-to-read manuals, all available for free download in English and Spanish <u>https://www.dhs.wisconsin.gov/physical-activity/foodsystem/got-dirt.htm</u>

- Garden toolkit (manual) for implementing youth gardens
- Cold Frame Manual
- Container Gardening Manual
- Microfarm Manual
- Simple Raised Bed Instructions

<u>Got Veggies?</u> – curriculum geared for 2nd and 3rd grades; goal is to get children to eat more fresh fruits and veggies; 7 full lesson plans, garden-based activities, fun recipes, helpful tips for cooking and eating in the garden. Free to download in English and Spanish at <u>https://www.dhs.wisconsin.gov/physical-activity/foodsystem/gotveggies.htm</u>

Online guide to books, government documents, articles about school gardening from the early 1900s to today, with links to full text where available. By Suzi Teghtmeyer, MSU Librarian; <u>http://libguides.lib.msu.edu/SchoolGardens</u>

<u>School Garden Project</u> – creating school gardens; resource links; free newsletter – <u>https://www.schoolgardenproject.org/</u>

<u>Nutrients for Life Foundation</u> – Free curricula, lesson plans, posters, bookmarks, online videos, experiment ideas, recipe cards, etc for elementary through high school students regarding soil and fertilizers and the role they play in the food industry. Also online is an application for a \$50 grant to implement their lessons in your classroom as well! <u>http://nutrientsforlife.org/</u>

<u>California Foundation for Agriculture in the Classroom – www.cfaitc.org</u>; lessons, ideas, fact and activity sheets, additional resources; annually updated resource guide available for free download

<u>USDA Food and Nutrition Service</u>, <u>https://www.fns.usda.gov/</u> is the place to order free print copies of, or to download, the following gardening and nutrition curricula:

- * Team Nutrition Cooks! (cooking-based nutrition education activities for 8-12 year olds) https://www.fns.usda.gov/tn/cooks
- * Grow It, Try It, Like It! (preschool fun with fruits and vegetables) https://www.fns.usda.gov/tn/grow-it-homes

Nature Works Everywhere, presented by The Nature Conservancy. Garden Resources

https://natureworkseverywhere.org/resources/?tag=garden short videos and lesson plans for middle school students covering: habitat and biodiversity, how a garden impacts a community, the ecological processes at work in a garden,

how a garden serves as a watershed, the carbon footprints of industrial tomatoes and local tomatoes, soil and how it works in the garden, tips for starting school gardens, pollinator garden tips, rain garden resources, caring for your garden, planning for your garden, creating a garden in a day, even managing fears in the garden!

<u>Foodmaster</u> – Food, Math, and Science Teaching Enhancement Resource <u>http://www.foodmaster.org/</u> Free online curricula for grades 3-5, 6-8 and higher education that uses food to teach math and science skills – biology, chemistry, microbiology, nutrition and health, as well as math concepts including numbers and operation, algebra, geometry, measurement, and problem solving.

<u>American Farm Bureau Foundation for Agriculture</u> - <u>http://www.agfoundation.org/</u> Free online lesson plans, interactive games, fun food facts, grant opportunities, contests, resource lists, agriculturally accurate books for all grades.

Lessons by <u>Tower Garden</u> - <u>http://www.towergarden.com/grow/lesson-plans</u> - Math, science, and literacy lessons for pre-K through 7th grade and up. Lessons cover fertilizer, leaves, nutrition, flavors, pigments, roots, stems, urban gardening, plant parts, etc. No tower garden necessary for many of the lessons.

<u>Cornell Institute for Biology Teachers</u> - <u>https://blogs.cornell.edu/cibt/labs-activities/</u> - middle and high school activities regarding plants, such as flower reproduction, photosynthesis, ethnobotany, effects of household chemicals on germination of radish seeds, natural selection/coevolution of goldenrod and galls, stomata, and more!

<u>A Garden of Words</u> – A bilingual (Spanish-English) gardening dictionary for elementary schools and after-school gardening programs. <u>http://anrcatalog.ucanr.edu/pdf/8423.pdf</u>

<u>Where Your Food Comes From</u> – Short, narrated powerpoints about food distribution, cacao, tomatoes, pineapples, bananas, peanuts, pumpkins, rice, oranges, coffee, potatoes, watermelon, apples, carrots, tea, popcorn, and food festivals. Suitable for late elementary and middle school. <u>https://web.extension.illinois.edu/food/siteindex.cfm</u>

<u>BioEd Online</u> – Science teacher resources including news, videos, lessons and more. Free to access. Plants and ecology are just two of the many focused topics! <u>http://www.bioedonline.org/</u>

<u>Edible Schoolyard</u> – Their mission is to build and share a national edible education curriculum for preK through high school. Free lesson plans, and free Edible Education 101, a UC Berkeley course that explores the future of food, its diverse systems, and movements. Online lectures and associated reading material. <u>https://edibleschoolyard.org/</u>

<u>Life Lab</u> - School garden resources including lessons, webinars, outdoor classroom management tips, etc. <u>http://www.lifelab.org/</u>

<u>Whole Kids Foundation</u> – School Gardens Activity Guide – 35 lessons with activities to engage students in fun and educational exploration of fruits, vegetables and healthy eating. <u>https://www.wholekidsfoundation.org/assets/documents/AHA_WKF_Garden_Curriculum_rev4.2.pdf</u>

<u>Soil Science Society of America</u>: Soil Science Teacher Resources: <u>www.soils4teachers.org</u> – soil basics, lessons and activities including environmental issues, human culture and soil interaction, forensics, food production, etc.

<u>Web Soil Survey</u> through the USDA/NRCS. Go online and find your school or home site, and find out what type of soil you have! You can find out what type of soil, what the parent rock is, whether the land is good for farming, etc. It is an interesting way to explore soil! <u>http://websoilsurvey.nrcs.usda.gov</u>

<u>Digging into Soil: A Garden Practicum</u> A high school curriculum in soil science (10 lessons) aligned with NGSS <u>https://kidsgardening.org/wp-content/uploads/2018/09/DiggingIntoSoil KidsGardening 201809.pdf</u>

<u>Garden Ecology Resource Guide</u> – booklet of ideas for K-12 teachers to teach ecology in a school garden <u>https://issuu.com/gardenecologyresourceguide/docs/garden_ecology_resource_guide</u> <u>Agricultural History Society's Food History Resource Page</u> – links to online resources, documentaries and films about food, farming and history (food in the movies, effects of commercial agriculture, USDA map of food deserts, home economics library, coffee farmers in African, etc. etc.) <u>https://www.aghistorysociety.org/food-history-resource-page</u>

Child Safety in the Garden

https://www.lsuagcenter.com/topics/family_home/family/childcare/be_child_care_aware/environments/child-safetyin-the-garden

Interesting things to do:

<u>Plays about gardening</u> by Bad Wolf Press (come with illustrated script, CD audio recording with rehearsal and performance music, teacher's guide with staging information and costume suggestions, lifetime performance rights) <u>www.badwolfpress.com</u>

- "The Garden Show" grades 2-6 (25 min. play), covers soil, photosynthesis, pollination, garden creatures
- "Earthworms Make America Great!" grades K-3 (20 min. play), teaches importance of worms for aeration, soil nutrients, and composting

Build Your Own Greenhouse Out of 2-Liter Bottles: http://www.reapscotland.org.uk/wpcontent/uploads/2011/04/Plastic_Bottle_Greenhouse_Instructions_2004.pdf

<u>'Make Your Own Candy'</u> (chocolate, gummies, chewing gum) kits – show kids where their food comes from, using seaweed, chicle, and cacao beans! Kits come with lesson plans and educational background, some of which can be downloaded from site: <u>http://www.gleegum.com/product-category/candy-kits/</u>

Virtual experiences

- The Great Plant Escape (Univ. of Illinois) solve plant 'mysteries' http://urbanext.illinois.edu/gpe/gpe.html
- The Adventures of Herman worm fun http://urbanext.illinois.edu/worms/index.cfm
- Pest Private Eye (IPM game) <u>https://pested.unl.edu/pestpi</u>

<u>Build a Flowering Plant Model</u>: Detailed plant model, made by kids out of toothpicks, Q-tips, straws, yarn, tissue paper, etc. Buy the kit and then reuse for years with supplies from around the house. \$34 for kit (enough material for the first 30 students, you can replace easily) Easy and fun activity and the kids love it!!! <u>https://www.wardsci.com/store/product/8868720/build-a-flowering-plant-model-an-inquiry</u>

<u>Root-viewer ("Rhiz-o-Tron")</u> – want to see plant roots? Don't pay a lot of money for a factory-made root viewer. Sprout seeds in clear plastic cups, in jewelry bags on yarn necklaces, or use an overhead transparency to make a 'window' in a milk carton from the school lunch!! Or just grab a water hyacinth and pull it out of the water—voila!

<u>Cheap chia pets</u> – Give each kid a sponge or piece of a sponge. Sprinkle with seeds (such as alfalfa). Wet. Wait. Use all the sponges to build a model of a South American pyramid, with gardens at each level!!

<u>Hydroponic gardening</u> – use deli containers, 2-liter bottles, plastic tubs, old aquariums, or even cups to grow plants from seed in the classroom under lights. An easy introduction to hydroponics for elementary, middle and high schoolers is *Classroom Hydroponic Plant Factory* by Foothill Hydroponics, Inc.

<u>Garden on a Wall</u> using Wolly Pockets, large felt pockets with waterproof barriers that provide a reservoir of water for plants yet let excess evaporate without damaging a wall or fence. They also make (class sets of!) plastic buckets that are made to hang from a specific wedge that you can easily ziptie to a chainlink fence. <u>https://wallygro.com/</u>

<u>Dendrochronology: Tree Ring Dating Kit</u> (Lab-Aids Kit #52) – Simple exercise of taking two different "tree cores" and determining age of tree, periods of wet/dry climates, year a cabin was built with wood, etc. Middle elementary grades would be appropriate; higher if you want to include xylem, pith, cambium and other tree anatomy. \$53.45 for supplies for 30 students (reusable) at <u>https://store.lab-aids.com/kits-and-modules/details/dendrochronology-tree-ring-dating</u>

<u>*Garden with Garbage (Leftovers)</u> <u>https://digitalcommons.usu.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1878&context=extension_histall</u>

Sources of supplies:

<u>Seeds</u> – Check the 'bean' section of your local supermarket! Buy them by the pound at a natural foods store. Get them on sale at the end of the growing season. Collect them off of plants around parking lots.

<u>Buckets</u> – Local barns, farms, petting zoos, etc. throw away a lot of feed and supplement buckets of all sizes. Check with a caterer or restaurant for buckets that food products come in (icing, pickles, etc).

<u>Pots</u> – Make your own by rolling a folded over newspaper (a few inches wide and a few sheets thick) around a tin can (let the paper hang over the end of the can about an inch or two) and folding the bottom in. Masking tape will break down in the soil if you want to tape your pot closed and just plant it straight into the ground later. Use milk cartons, Dixie cups, old shoes, old playground balls, a Ziploc bag filled with soil, etc

<u>Spaces to grow</u> – zip-tie old gutters or pots to chain-link fence for vertical gardens; plant in parking lot islands, place planters or tires or buckets on the edges of the playground or on concrete 'patios', line cups up along window sills, plant in a wagon that you can wheel outside and bring in again at night, plant in a shopping cart even!

<u>Hydroponic system supplies</u> –Carolina Biological Supply (<u>www.carolina.com</u>); eNasco (<u>www.enasco.com</u>); some local garden centers have net pots, clay pellets, rockwool, pumps, etc.

Ideas for Theme Gardens: (A few plants to get you started)

Circus garden – peanuts, popcorn, 'elephant ears', monkey grass Bird garden (to attract birds) – sunflowers, blueberries, snapdragons, cosmos Pizza garden – tomatoes, onions, peppers, garlic, oregano, basil Chinese cuisine garden – snowpeas, radishes, cucumbers, Chinese cabbage, bok choy Mexican cuisine garden – beans, tomatoes, hot peppers, cumin, cilantro Fall/Halloween garden – pumpkins, gourds, Indian corn, popcorn, sunflowers Native American garden – corn, beans, squash Tea garden – mints, lemon balm, chamomile, cinnamon basil, anise hyssop Sharing garden – sunflowers, catnip, popcorn, birdhouse gourds, peanuts Touching garden – lamb's ears, succulents, ferns, grasses, geraniums, mosses Scented garden – moonflowers, Madonna lily, white roses, lamb's ears Crafts garden – flowers, gourds, bamboo Butterfly garden – marigold, zinnia, salvia, butterfly weed, yarrow, purple coneflower, cosmos, lantana

Finding \$\$\$ to fund your gardening activities

Annie's Homegrown Grants for Gardens -- http://www.annies.com/giving-back/school-gardens/grants-for-gardens/ Local education foundation, PTA, etc. – grants for start-up/maintenance funds Lowe's, Home Depot donations/grants – grants for gardening equipment Oklahoma Ag in the Classroom Pork Council Grant – grants (\$100 to \$300) to use AITC lessons Oklahoma Dept of Environmental Quality – grants for environmental education (\$100 to \$1,000) Local wellness grants (hospitals, etc.) – grants for nutrition education Literacy organizations (Altrusa, etc.) – grants for books about gardening Kidsgardening.org – lists of grants nationwide for gardens Nutrients for Life Foundation -- \$50 to help offset cost of implementing their soil/fertilizer lessons (<u>http://nutrientsforlife.org/</u>) School Donation Request Template (generic) https://drive.google.com/file/d/0B7X7XeC2rSFdQTBGZ2dsSkxIcTg/view Grant Writing Tips

<u>https://kidsgardening.wpengine.com/wp-content/uploads/2016/03/KG_GrantWritingTips-2016.pdf</u> <u>https://sparkpe.org/wp-content/uploads/fundingtips.pdf?x81825</u> <u>Grant Searching Resources</u> <u>https://lifelab.org/2020/03/grant-searching/</u>

Resource Books:

- Barrett, Katharine, Jennifer White, and Christine Manoux. 2008. *Botany on Your Plate: Investigating the Plants We Eat.* K-4 explorations of roots, stems, leaves, flowers, fruit and seeds. The National Gardening Association. ISBN 978-0-915873-49-4
- Bremner, Elizabeth and John Pusey (3rd edition edited by Yvonne Savio). 1999. *Children's Gardens: A Field Guide for Teachers, Parents, and Volunteers*. Basic gardening concepts and related activities for children to do. University of California Cooperative Extension Common Ground Garden Program.
- Brown, Patricia A., Ginger R. Krelle, and Grodan, Inc. 2010. *Classroom Hydroponic Plant Factory*. Simple hydroponics lessons for elementary, middle and high school students. Experiments, instructions for constructing inexpensive hydroponic systems, and worksheets included. 264 pp. Published by Foothill Hydroponics, Inc.
- Bruce, Hank and Tomi Jill Folk. *Gardening Projects for the Classroom and Special Learning Programs*.2003. Gardening lessons integrated into art, literature, social studies, science for all grades. List of safe and dangerous plants for school and home as well as other resources. 212 pp. ISBN 978-0-9705962-1-5. Published by Petals and Pages.
- Bucklin-Sporer, Arden and Rachel Pringle. *How to Grow a School Garden: A Complete Guide for Parents and Teachers.* (creating and developing the garden space, guidance for school garden programs). Timber Press. 2010. ISBN 978-1-60469-000-2. \$24.95
- Coblyn, Sara. *French Fries and the Food System*. Activities organized by season and related to farms and gardens, the food system (how your food gets to you), farmers' market analyses, landscape design, planning a garden, etc. Aims to teach about the practical nature of agriculture as well as about the impact of our global food system. Geared toward teens ages 14-16. The Food Project, Inc. 2008. ISBN 09703530-0-6
- Collins, Chris, and Lia Leendertz. 2012. *Grow Your Own for Kids*. Basic gardening information with lots of full-color photos. Covers everything from different places to plant plants, how to care for plants, attracting animal visitors and keeping unwanted animal visitors away, vegetables to grow and how to eat them, composting, etc. Octopus Publishing Group Ltd. ISBN 978-1-84533-606-6. \$14.99
- Dennee, JoAnne, Jack Peduzzi and Julia Hand. 1996. *In the Three Sisters' Garden: Native American Stories and Seasonal Activities for the Curious Child.* Adaptable for ages 5-9. Two distinct, year-long journeys through the Three Sisters garden—one from the perspective of a family, another from the perspective of a neighborhood. Each is a unique journey through the four seasons, with activities designed to engage children in inquiry-based learning. Kendall/Hunt Publishing Company. ISBN 0-7872-2175-9
- Dyer, Hadley. 2012. *Potatoes on Rooftops: Farming in the City*. Short (1-2 page) entries about a wide variety of gardening-related topics---food miles, inner-city deserts, hunger, Victory gardens, vertical gardens, aquaponics, rooftop and basement gardens, microgardens, community gardens, chickens, composting and anaerobic digesters, water harvesting, etc. Plenty of photographs and interesting facts. Good place to start ideas for lesson plans, projects, posters, etc. Annick Press. ISBN 978-1-55451-425-0 \$24.95
- Earl, Betty. 2012. *Fairy Gardens: A Guide to Growing an Enchanted Miniature World*. Making a fairy garden inside or outside, plants traditionally associated with fairies, fairy legends. B.B. Mackey Books. ISBN 978-1-893443-50-1
- Ellis, Brian. *Learning from the Land: Teaching Ecology through Stories and Activities.* (stories to be read to the class that teach science concepts, with creative writing and other activities). 1997. Teacher Ideas Press ISBN 1-56308-563-1 \$23.00
- Farrell, Holly. *Plants from Pits: How to Grow a Garden From Kitchen Scraps*. 2015. ISBN 978-1-78472-103-9 \$14.99
- Favretti, Rudy and Joy. *For Every House a Garden: A Guide for Reproducing Period Gardens*. Garden design for reproducing gardens of all sorts between 1607-1940AD, with a list of authentic plants from each era. University Press of New England. 1990. ISBN 0-87451-514-9

- Guy, Linda; Cathy Cromell, and Lucy Bradley. *Success with School Gardens: How to Create a Learning Oasis in the Desert.* (gardening basics, managing the school garden). Arizona Master Gardener Press. 1996. ISBN 0-9651987-0-7 \$14.95
- Jurenka, Nancy and Rosanne Blass. *Beyond the Bean Seed: Gardening Activities for Grades K-6*. A long list of age-appropriate books—each book has a lesson to go with it, consisting of a gardening activity, a language arts activity, a creative activity, a recipe, a poem, and a list of related books. 1996. Teacher Ideas Press ISBN 1-56308-346-9
- Jurenka, Nancy and Rosanne Blass. *Cultivating a Child's Imagination through Gardening*. Companion book to *Beyond the Bean Seed*. 1996. Teacher Ideas Press ISBN 1-56308-452-X
- Kiefer, Joseph and Martin Kemple. *Digging Deeper: Integrating Youth Gardens into Schools and Communities*. How-to for setting up a garden, with seasonal activities as well as an evaluation and assessment tool kit. 1998. Common Roots Press. ISBN 1-884430-04-X \$19.95
- Krezel, Cindy. 101 Kid-Friendly Plants: Fun Plants and Family Garden Projects. Photos and descriptions of safe, fun plants along with project ideas. 2007. Ball Publishing. ISBN 978-1-883052-54-6 \$19.95
- Learning Zone Express. *Lana's Fruit and Vegetable Snack Recipes*. Healthy, simple and fun snack ideas for kids (kiwi rice cake teddy bear snacks, stuffed pea pod canoes with carrot paddles, pretend fried egg, etc.). ISBN 8-46742-00250-2
- Lovejoy, Sharon. A Grandma's Bag of Tricks: Toad Cottages and Shooting Stars. (130 activities including pizza box solar ovens, fairy houses, peek-a-boo planters, worm hotel). 2009. ISBN 9-780761-150435 Workman Publishing, NY \$14.95 By the same author: Roots, Shoots, Buckets and Boots: Gardening Together with Children and Sunflower Houses: A Book for Children and Their Grown-Ups.
- Mellichamp, Larry, and Paula Gross. 2010. *Bizarre Botanicals: How to Grow String-of-Hearts, Jack-in-the-Pulpit, Panda Ginger, and Other Weird and Wonderful Plants.* Whether you choose to grow some weird plants or not, kids will love learning about these bizarre plants, including carnivorous plants, ferns, odd-shaped or stinky flowers, plants that shoot out pollen, etc. Information for successfully growing these plants, as well as interesting information and full-color photos, is included. Timber Press. ISBN-13: 978-1-60469-076-7
- National Gardening Association. *GrowLab: Activities for Growing Minds*. Activities about plant life cycles, plant reproduction, the diversity of life, and human/plant interactions, for grades K-2, 3-5, and 6-8. 1990. ISBN 0-915873-32-X
- Ocone, Lynn and Eve Pranis. *The National Gardening Association Guide to Kids' Gardening: A Complete Guide for Teachers, Parents, and Youth Leaders.* (the basic challenges of starting a garden, planning for success, developing and designing, garden activities and experiments, indoor and container gardening). 1990. John Wiley and Sons. ISBN 0-471-52092-6 \$9.95
- Paye, Gabriell. 2000. *Cultural Uses of Plants: A Guide to Learning About Ethnobotany*. Background information, laboratory activities, experiments, collecting and preserving plants, testing plants for medicinal properties and household uses (middle and high school students). The New York Botanical Garden Press. ISBN 0-89327-422-4 \$18.50
- Stewart, Amy. 2009. *Wicked Plants: The Weed That Killed Lincoln's Mother and Other Botanical Atrocities*. Stories and descriptions of deadly, dangerous, intoxicating, destructive, offensive, painful, and illegal plants. Algonquin Books of Chapel Hill. ISBN-13: 978-1-156512-683-1 \$18.95
- Tilgner, Linda. *Let's Grow! 72 Gardening Adventures with Children.* (activities for planting, discovering; organized by age group (2-4, 5-7, 11+) and season). 1988. Storey Communications, Inc. ISBN 0-88266-470-0 \$10.95
- Various. 2007. The Biography of Bananas, The Biography of Chocolate, The Biography of Coffee, The Biography of Corn, The Biography of Cotton, The Biography of Potatoes, The Biography of Rice, The Biography of Rubber, The Biography of Silk, The Biography of Spices, The Biography of Sugar, The Biography of Tea, The Biography of Tobacco, The Biography of Tomatoes, The Biography of Vanilla, The Biography of Wheat, The Biography of Wool. Upper elementary/middle school level, ~30 pages each, lots of photos and general information about the domestication, spread, production and uses of different crops. Crabtree Publishing Company. \$8.95

Children's Storybooks About Gardens:

- Bloom, Stephanie. *A Place to Grow.* 2002. A tiny seed is blown by the wind from one environment to the next, hoping to find where he belongs so he can start growing. Bloom & Grow Books. ISBN 1-931969-07-8
- Child, Lauren. *I Will Never NOT EVER Eat a Tomato*. 2000. A big sister comes up with creative ways to get her little sister to eat vegetables. Candlewick Press. ISBN 978-0-7636-2180-3 \$6.99
- Coy, John. *Two Old Potatoes and Me.* 2003. A young girl discovers two old, sprouting potatoes at her dad's house. They plant them to see if they can grow more potatoes. (Recipe for mashed potatoes in back of book.) Nodin Press. ISBN 978-1-935666-46-2 \$7.99
- Darbyshire, Tom, and C.F. Payne. 2012. *Who Grew My Soup?* A young boy discovers who grows the ingredients for his soup. Publications International, Ltd. ISBN 978-1-4508-6645-3 \$9.95
- Fine, Edith Hope, and Angela Demos Halpin. 2010. *Water, Weed, and Wait.* Students at Pepper Lane Elementary get a visit from the garden lady and transform a weedy patch of playground into a garden, with the help of a grumpy neighbor who is an avid gardener. ISBN 978-1-58246-320-9 \$15.99
- Grigsby, Susan. 2010. *In the Garden with Dr. Carver*. Historical fiction about George Washington Carver's career in plant science and how he helped people learn about plants and their uses. Albert Whitman & Co. ISBN 978-0-8075-3630-8 \$16.99
- Lin, Grace. 1999. *The Ugly Vegetables*. When a little girl helps her mother plant a garden, she notices that how they plant and what they grow are different from their neighbors' gardens. Instead of flowers, she and her mother grow ugly vegetables. But after harvest, the little girl sees how delicious ugly vegetables can be (and so does the neighborhood). Charlesbridge Publishing. ISBN: 978-1-57091-491-1
- Littell, Robert. 1969. *Gaston's Ghastly Green Thumb*. A boy who uses his fork and thumb to eat vegetables gets reprimanded by his mother, then wakes up one day with vegetables growing out of his thumb. As they get bigger, it becomes a problem. . . . Full-color pictures, would be great for reading to students. Cowles Book Company, Inc. ISBN-13: 978-0402140511
- Middleton, Charlotte. *Nibbles: A Green Tale.* 2009. The guinea pigs of Dandeville love munching dandelion leaves so much that they almost eat them into extinction. A guinea pig named Nibbles finds the very last dandelion and carefully tends it until it makes a big head of tiny seeds, then blows the seeds all over town. ISBN 978-0-7614-5791-6 \$17.99

Books for Older Children:

- Burnett, Frances Hodgson. *The Secret Garden*.
- Fleischman, Paul. 1997. *Seedfolks*. People of varying ages and backgrounds slowly transform a vacant and trash-filled inner city lot into a garden. 102 pp. HarperCollins Publishers. ISBN-13: 978-0-06-447207-4 \$5.99

Interactive Books:

• Benner, Al. 2014. *Powerful Plants Volume 1: The Carrot-Napping*. Daucus the lovable carrot is taken hostage by Mean Gene, who wants to genetically modify him. (Animation is viewed through a phone or tablet via downloadable app from powerfulplants.net). 43pp. Powerful Plants, LLC. ISBN: 978-0-692-21130-4 \$19.95

Songs:

I've Got Potential (I'm a Little Seed) Suitable for preschool and early elementary https://youtu.be/sK6SfpOIhAQ

Vegetable Song for Kids <u>https://www.youtube.com/watch?v=Ds6tUxatnTs</u> A song with singing vegetables that start with each letter of the alphabet. . . suitable for elementary

Phone Apps:

Leaf Snap – snap a picture of a leaf, seed, flower or fruit to identify the tree species

<u>Audubon Guides – A Field Guide for Birds, Mammals, Wildflowers and Trees</u> – has photos, range maps and animal sounds to help you identify things you spot on a hike. Identifies at local, regional and international levels.

MyNature Animals Tracks - tips to finding animal tracks, animal sounds, pictures of scat and tracks

NatureFind - features thousands of natural places throughout the country and fun events throughout the year

<u>Project Noah</u> – document wildlife and plants as a citizen scientist; discover organisms around the world while connecting with other nature enthusiasts

• All web links current as of January 27, 2021