



The Book Planter

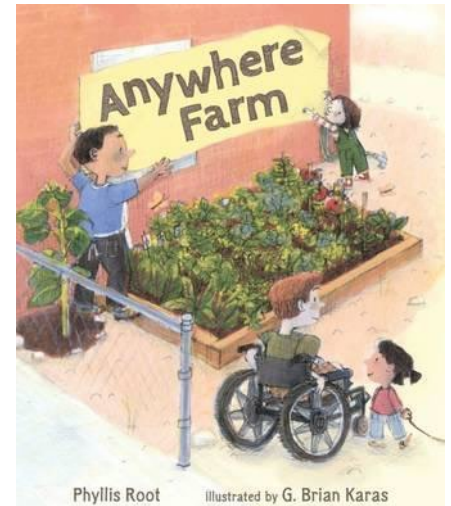


Ag in the Classroom

Post Office Box 27766 | Raleigh, NC 27611 | (919) 782-1705
ncagintheclassroom.com

January 2019: *Anywhere Farm*
Written by: Phyllis Root
Illustrated by: G. Brian Karas

For any anywhere farm, here's all that you need: soil and sunshine, some water, a seed. Sometimes when we think about farms, we think big tractors, large fields, and a barnyard full of animals, but this book shows us that you can create a farm anywhere! A box or a bucket, a boot or a pan—almost anything can be turned into a home for growing plants. This book delivers a modern rhyming mantra for anyone hoping to put their green thumbs to good use. Readers will learn about seed growth, types of vegetables, and pollination. After all, you can grow anywhere—all it takes is seed and someone to plant it.¹



Fun Facts

- 62% of North Carolina school districts participate in farm to school activities, which equates to 84 districts, 1,714 schools, and 1,042,810 students!²
- \$25,849,000 is invested in local food in schools in North Carolina.²
- School districts in North Carolina are currently buying the following types of food: 87% fruits, 87% vegetables, 24% milk, and 13% meat or poultry.
- Even largely urban North Carolina counties, such as Mecklenburg and Wake, participate in farm to school activities by serving locally grown food in cafeterias, and promoting agriculture through school-wide events.²
- School gardens can be rich, vibrant spaces for young people to deepen their understanding of local foods.³
- Urban gardening, which takes the form of backyard or roof-top, balcony gardening, and community gardening can help cultivate knowledge of agriculture to people who are not exposed to farming in the traditional sense.
- Studies show that when children have contact with soil during activities like digging and planting, they have improved moods, better learning experiences and decreased anxiety.⁴

Reading Comprehension⁵

After reading, ask aloud, “What four things are needed to grow a plant?” Discuss the importance of each component: seeds, sun, soil, water. Ask, “What were some of the items

that farms were planted in?” Some answers may include a crate, bucket and a truck. Ask the students what other items they might plant a farm in.

Next, ask the students if they remember the vegetables mentioned in the story. Ask questions such as, “Do you like vegetables? What kind do you like to eat? If you were to grow a vegetable garden, what types of things would you plant? What might you see flying around your vegetable plants?” Answers may include bees, butterflies, birds, lady bugs, etc. Ask students, “If you grow a different vegetables in your garden, how can you tell them apart when they are still seedlings (little plants)?” Explain the purpose of garden markers.

Personalizing the Text⁶

Students can innovate with the text that Phyllis Root offers, creating their own personalized book. Use the questions posed in *Anywhere Farm* as a frame for student written responses. For example, students respond to, “Where can you plant your anywhere farm?” using words and images. After writing and drawing their answers to each of the questions posed by the author, students can bind their completed pages into a book to be shared with classmates and family (or create an e-book version by scanning the pages and saving on a computer that can be shared visually).

Finding the Rhymes⁶

The text of *Anywhere Farm* is full of wonderful rhyming pairs. Re-read the book and ask students to identify the rhymes as they hear them. List their responses on the board or chart paper, and examine the spellings of the rhyming pairs to note any spelling patterns. Extend this study by listing a variety of edible plants. Play with rhymes to see if you can identify any rhyming pairs that could be extended into phrases and illustrations.

Designing a Garden

Invite your students to imagine a garden of their own creation. Offer art materials or live materials and a challenge to include unusual containers as part of their design (for inspiration, revisit *Anywhere Farm* to view “corn in a horn”). Consider offering students photographic images of unique gardens (a Google search of “unusual gardens” turns up great material). Students’ garden designs can be 2D or 3D. Offer an opportunity for students to share their design and to describe their garden and design process to their classmates.⁶ Help get their creative juices flowing by asking if they could grow a garden in their favorite toy or a common household item. Remind students that the garden must be functional, and to remember what plants/seeds need to survive (as outlined in *Anywhere Farm*). For example, a garden container made of paper or materials that breakdown easily might not be good long term.

Once the projects are complete, ask students to think about the following questions:⁷

1. List 3 ways you thought about the environment when planning your garden. (amount of sunlight, type of soil, temperature, animals/insects/pollinators, water)
2. What might be wrong if your garden was not growing well? Explain. (the quality of the soil, the amount of water the plants are getting, the amount of sunlight the plants are getting and whether or not the temperatures are appropriate for the plants)

Going on a Garden Hunt⁶

Gardens large and small can be found in surprising places. Ask your students to go on a garden hunt—either as a class around the school campus, or at home in their neighborhood (with a parent, or with a parent’s permission). Using digital cameras, or paper and drawing utensils, ask the students to capture images of the gardening sites they find. If possible, talk to the person who planted the garden—what are their reasons for growing? Then compare the images considering: What is different about each place where plant growth is encouraged? What is the same? What kinds of containers are used? What kinds of fences, borders, or boundaries are needed? Combine images and student composed text to create a photo essay featuring the gardens in your community.

Living Necklace⁸

Materials:

- corn seeds (can be found online, at a local feed and seed store, or by contacting a local farmer), one per student
- small, plastic jewelry bag, one per student
- yarn, long enough for each student to tie and wear as a necklace
- cotton ball, one per student
- hole punch
- water

Instructions:

1. Tell the students that they are going to create their own “farm” by growing a seed in a unique place, like the students in *Anywhere Farm*.
2. Provide the materials to each student.
3. Ask the students to dip their cotton balls in water (it helps to have water in cups). It needs to be thoroughly wet, but not dripping. Excess water will cause the seeds not to sprout.
4. Place the cotton ball inside the small plastic bag.
5. Put one corn seed inside the bag and place so that the seed is touching the cotton ball.
6. Seal the bag, and punch a hole above the seal of the bag.
7. String the yarn through the hole in the jewelry bag and tie the ends together.
8. Bags can be hung from tacks on a bulletin board or worn around the students’ necks, but keep in mind they need to be stored overnight in the classroom for observation the next few days.
9. Note that the seeds should sprout in three to six days. Starting on a Friday and making the first observations on Monday will speed up this activity.
10. Have students record in their journals the changes they observe in their seeds, including information such as when they see roots, sprouts or leaves, the colors of each of these components and how they change.

11. Students can measure their growth, and in small groups make charts or graphs of the data they collected for measurable traits (leaf and root length).

Links

- School Gardens in North Carolina (web-brochure)
<https://childnutrition.ncpublicschools.gov/information-resources/nutrition-education/school-gardens/school-gardens.pdf>
- School Garden Grant Opportunities
<https://guilford.ces.ncsu.edu/school-garden-grants/>
- North Carolina School Garden Census
<https://farmtoschoolcensus.fns.usda.gov/find-your-school-district/north-carolina>
- How Does Your Garden Grow? (video)
https://www.youtube.com/watch?time_continue=1&v=NZd5od54-OU

Sources

1. Root, Phyllis. Somerville: Candlewick Press, 2017, Print.
2. <https://farmtoschoolcensus.fns.usda.gov/>
3. <https://localfood.ces.ncsu.edu/local-food-farm-to-school/local-food-school-gardens/>
4. <http://www.pbs.org/parents/expert-tips-advice/2016/03/gardening-kids-affects-childs-brain-body-soul/>
5. http://www.candlewick.com/book_files/9999999911.kit.16.pdf
6. <http://www.theclassroombookshelf.com/2017/04/anywhere-farm/>
7. https://www.agclassroom.org/teacher/matrix/lessonplan.cfm?lpid=206&search_term_lp=school%20gardens
8. https://www.agclassroom.org/teacher/matrix/lessonplan.cfm?lpid=219&author_state=0&search_term_lp=necklace

K-5 Subject Areas

Reading, Writing, Speaking and Listening, Science

North Carolina Standard Course of Study

Reading

- **RL.K.1.** With prompting and support, ask and answer questions about key details in a text.
- **RL.1.1.** Ask and answer questions about key details in a text.
- **RL.2.1.** Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
- **RL.3.1** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- **RL.4.1** Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- **RL.5.1** Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
- **RL.K.4** With prompting and support, ask and answer questions about words in a text that suggest feelings or appeal to the senses.
- **RL.1.4** Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.
- **RL.2.4** Describe how words and phrases supply rhythm and meaning in a story, poem, or song.
- **RL.3.4** Determine the meaning of words and phrases as they are used in a text, identifying words that impact the meaning in a text.
- **RL.4.4** Determine the meaning of words and phrases as they are used in a text, including words that affect meaning and tone
- **RL.5.4** Determine the meaning of words and phrases as they are used in a text, recognizing specific word choices that contribute to meaning and tone.

- **RI.K.1** With prompting and support, ask and answer questions about key details in a text.
- **RI.1.1** Ask and answer questions about key details in a text.
- **RI.2.1** Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
- **RI.3.1** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- **RI.4.1** Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- **RI.5.1** Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
- **RI.K.2** With prompting and support, identify the main topic and retell key details of a text.
- **RI.1.2** Identify the main topic and retell key details of a text.

Writing

- **W.K.1** Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book.
- **W.1.1** Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide closure.
- **W.2.1** Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words to connect opinion and reasons, and provide a concluding statement or section.
- **W.3.1** Write opinion pieces on topics or texts, supporting a point of view with reasons.
- **W.4.1** Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
- **W.5.1** Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
- **W.K.2** Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.
- **W.1.2** Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide closure.
- **W.2.2** Write informative /explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.
- **W.3.2** Write informative /explanatory texts to examine a topic and convey ideas and information clearly.
- **W.4.2** Write informative /explanatory texts to examine a topic and convey ideas and information clearly.
- **W.5.2** Write informative /explanatory texts to examine a topic and convey ideas and information clearly.
- **Speaking and Listening**
 - **SL.K.2** Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
 - **SL.1.2** Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
 - **SL.2.2** Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
 - **SL.3.2** Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
 - **SL.4.2** Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
 - **SL.5.2** Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
 - **SL.K.4** Speak audibly and express thoughts, feelings, and ideas clearly.
 - **SL.1.4** Produce complete sentences to describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.
 - **SL.2.4** Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent and complete sentences.
 - **SL.3.4** Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly in complete sentences at an understandable pace.

- **SL.4.4** Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; adjust speech as appropriate to formal and informal discourse.
- **SL.5.4** Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; adapt speech to a variety of contexts and tasks.
- **SL.K.5** Add drawings or other visual displays to descriptions as desired to provide additional detail.
- **SL.1.5** Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.

Science

- **K.E.1.1** Infer that change is something that happens to many things in the environment based on observations made using one or more of their senses.
- **1.L.1.1** Recognize that plants and animals need air, water, light (plants only), space, food and shelter and that these may be found in their environment.
- **1.L.1.2** Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world.
- **1.L.2.1** Summarize the basic needs of a variety of different plants (including air, water, nutrients, and light) for energy and growth.
- **3.L.2.1** Remember the function of the following structures as it relates to the survival of plants in their environments:
 - • Roots – absorb nutrients
 - • Stems – provide support
 - • Leaves – synthesize food
 - • Flowers – attract pollinators and produce seeds for reproduction