

WISCONSIN SCHOOL GARDEN INITIATIVE BRIEF

CONNECTING GARDEN-BASED CURRICULUM TO STANDARDS



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Much of what you may already be doing with your school garden can be aligned with educational standards set by initiatives such as Common Core State Standards Initiative and Next Generation Science Standards. There are very simple ways to involve the garden in lessons in subjects like math, language arts, and science to assist in meeting standards set by these initiatives. In this document you will find ways the garden may be incorporated into lessons in various subjects and learn what you may already be doing that aligns with standards in different subjects.



Using the Garden in the Classroom

Mathematics

The garden and its produce can be incorporated into math lessons through simple exercises such as **describing shapes** of plants and produce and **measuring** plants and produce. Simple math questions can be created and demonstrated through the use of products from the garden, whether it is cutting up a vegetable to practice **fractions**, or using seeds for **addition** and **subtraction**. Common themes from the Common Core State Standards Initiative for mathematics in grades kindergarten through fifth grade that can be demonstrated using the garden and its products include **counting**, **measurements**, **shape analysis**, **addition**, **subtraction**, and **fractions**. The lesson [Shape Shifters in the Math Garden](#) from the garden-based curriculum [Captain Planet's Project Learning Garden Program](#) is an example of a lesson that offers opportunity to incorporate math through the use of measurements and graphing using products of the garden.

Language Arts

Standards for language arts from Common Core State Standards Initiative are easily incorporated into lessons as they include aspects of listening, asking and answering questions, and writing. Simple ways to incorporate language arts standards into lessons involving the garden could include reading a **short story** about gardening to the class, including different forms of **media** in the lesson, having students write **reflections** and insights about a lesson in the garden, and having students create forms of media to represent understanding of the lesson. Reading and discussing a short story book like *Bear and Bunny Grow Tomatoes* by Bruce Koscielniak is a great way address Language Arts standards and possibly science standards as well. Story books are a great way to open up a unit or larger lesson regarding the garden.

Using the Garden in the Classroom continued

Science

Many standards from Next Generation Science Standards can be met through lessons involving the garden in the categories Physical Sciences (PS), Life Science (LS), and Earth and Space Science (ESS). Lessons about **photosynthesis**, **what plants need to survive**, **interactions** between plants and animals, and **plant cycles** and **structures** are all topics that can be discussed using the school garden while covering various Next Generation Science Standards for grades K-5. The lesson *Stems & Leaves* from [Got Veggies](#) provides opportunity to touch on multiple science standards especially in the Life Science category.

Keep the Garden in the Curriculum

The garden can be used in other subjects like social studies by planting a Three Sisters Native American garden, in art to make art projects, and to make musical instruments for music class. Being creative to involve the garden in the classroom whenever possible is sure to keep kids engaged in and connected to nature and what they are putting in their bodies. Nutrition curricula such as [Got Veggies?](#) are filled with lesson plans that meet state standards in several subjects and engage kids in the garden and planting, so you don't need to reinvent the wheel. A little creativity and using lesson plans that already exist to include the garden and nature in the classroom will impact the way the students learn and view the world while still meeting standards set by the state and initiatives like Common Core and Next Generation Science.



Standards Resources

Common Core State Standards for English Language Arts:

http://www.corestandards.org/wp-content/uploads/ELA_Standards.pdf

Common Core State Standards for Mathematics:

http://www.corestandards.org/wp-content/uploads/Math_Standards.pdf

Next Generation Science Standards:

<http://www.nextgenscience.org/sites/ngss/files/NGSS%20DCI%20Combined%2011.6.13.pdf>

Curricula & Activities for Meeting Standards

Got Veggies:

<https://www.dhs.wisconsin.gov/publications/p0/p00228.pdf>

Science Schoolyard:

<http://scienceschoolyard.blogspot.com/search/label/garden>

Life Lab Garden Resources:

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

Captain Planet Foundation:

http://captainplanetfoundation.org/learning-garden-lessons/#ert_pane1-1

Full WSGI List:

<http://www.communitygroundworks.org/content/curricula-and-activities-school-gardens>



For more information about the Wisconsin School Garden Initiative,

visit us at WISchoolGardens.org

or contact us at

Community GroundWorks
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