

GLOBAL LEARNING & GARDENING

Afterschool and expanded learning programs can provide the next generation with the 21st century knowledge and skills they need to be ready for college, work and citizenship in a global innovation age. Programs that adopt a global learning framework fulfill their youth development mission while supporting the implementation of academic state standards through intentional, high-quality programming that helps youth apply knowledge and skills to real-world settings.

Asia Society and the Council of Chief State School Officers (CCSSO) define global competence as the "possession of the knowledge, skills, and dispositions to understand and act creatively on issues of global significance." Globally competent students must have the knowledge and skills to:

- **Investigate the world**, including their immediate environment and beyond
- **Recognize perspectives**, both their own and others'
- **Communicate ideas** and collaborate with diverse audiences
- **Take action** to improve conditions both locally and globally

EXAMPLE LEARNING UNITS

You can use this global competence framework for to create *intentional afterschool activities* that support your existing program goals and outcomes. For example, if you already offer gardening, you can make gardening an opportunity for global learning. Children can research and grow foods from around the world; investigate global issues such as food production and access, famine, nutrition, and hunger; study how food choices affect personal and community health; examine how food consumption and agricultural practices affect the environment; or learn how to set up and run a plant-based business.

The ideas in these example learning units are not meant to be prescriptive but are meant to spark ideas; use them as a springboard for your own ideas. Each example here needs to be fleshed out through additional lesson and unit planning.

Ages/Grades: Elementary

Global Competence Domains	Example Activity	Example Program Outcomes*
Investigate the World	Children learn about plant parts, life cycles of plants, and the optimal conditions for healthy growth (soil, climate, moisture, geography, nutrients, and pest management).	Next Gen Science Standards (NGSS): 3-LS1-1 Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death. 3 rd Grade Global Leadership Performance Outcomes: Provides a basic summary of evidence from sources that are relevant to a local, regional, or global question.
Recognize Perspectives	Children trace the origins, history, health benefits, and cultural uses of a favorite vegetable. Children compare information with peers' and use prior research to determine what to grow in the garden based on preferences, geography, local climate, and potential cultural or nutritional uses of plants.	Next Gen Science Standards (NGSS): 3-LS4-3 Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all. 3 rd Grade Global Leadership Performance Outcomes: Adopts and accurately restates an opinion, and at least one piece of supporting evidence from a source, in response to a global question.
Communicate Ideas	Children work in groups and use their research to design a garden (selecting an ideal location, structure, purpose, and layout). The groups review all garden design ideas, select a final design, and determine uses for plants.	Next Gen Science Standards (NGSS): 3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. 3 rd Grade Global Leadership Performance Outcomes: Communicate and collaborate using verbal and nonverbal communication skills in basic way
Take Action	Children plant and maintain the garden, tracking and assessing conditions and progress. Children give tours of the garden to community members to share what they learned and how they are using the plants.	Next Gen Science Standards (NGSS): 3-LS3-2 Use evidence to support the explanation that traits can be influenced by the environment. 3 rd Grade Global Leadership Performance Outcomes: Reflects on the general appropriateness of proposed actions and advocacy for improvement.

Ages/Grades: Middle/High School

Global Competence Domains	Example Activity	Example Program Outcomes*
Investigate the World	Youth investigate global food production and distribution processes and factors that contribute to food insecurity using internet research; field trips to farms, markets, or food companies; and interviews with guest speakers and community members.	K-12 Service-Learning Standards: Meaningful Service: Service-learning encourages participants to understand their service experiences in the context of the underlying societal issues being addressed. 10 th Grade Global Leadership Performance Outcomes: Selects and uses multiple international and domestic sources to identify relevant evidence that addresses a global question.
Recognize Perspectives	Youth compare and contrast local food access and hunger issues with those in their own community and other regions of the country or world. Youth map local food deserts and research and weigh possible solutions to address the issue.	K-12 Service-Learning Standards: Diversity: Service-learning helps participants identify and analyze different points of view to gain understanding of multiple perspectives. 10 th Grade Global Leadership Performance Outcomes: Explains various perspectives or interpretations of a situation, event, issue, or phenomenon, and reflects an understanding of different contexts, such as access to knowledge, technology, or resources.
Communicate Ideas	Youth select a method for sharing their research and proposed solutions for food production and distribution (e.g. PowerPoints, charts and graphs, persuasive letters, public service announcement, etc.). Youth collaborate to create the product to demonstrate their knowledge on the issue.	K-12 Service-Learning Standards: Reflection: Service-learning reflection includes a variety of verbal, written, artistic, and nonverbal activities to demonstrate understanding and changes in participants' knowledge, skills, and/or attitudes. 10 th Grade Global Leadership Performance Outcomes: Selects and applies appropriate resources, such as technology and media, to communicate and collaborate with a range of diverse individuals.
Take Action	Using their research, youth work with community partners to design a plan for increasing local food-insecure populations' access to nutritious foods, e.g. hydroponic gardens, community gardens, garden-based school lunches, food pantries, green markets, etc. Youth host an advocacy event for community members and urban planners to share their research, garden designs, and food distribution ideas.	K-12 Service-Learning Standards: Partnerships: Service-learning partners collaboratively develop and implement action plans to meet specified goals. 10 th Grade Global Leadership Performance Outcomes: Identifies opportunities for personal or collaborative action to address a situation, event, issue or phenomenon in a way that is likely to improve conditions.

*The listed outcomes are a *representative* sample and not a comprehensive or prescriptive list of standards/outcomes that could be included in these units. Customize the academic and youth development outcomes per your program or funder. Consider using existing frameworks and measurement tools to support the articulation of the program's outcomes for youth, e.g. Common Core State Standards, Healthy Eating and Physical Activity (HEPA) Standards, Habits of Mind, 21st Century Skills, youth development, 40 Developmental Assets, college/work readiness, Weikart YPQA, NIOST APT, etc.

RESOURCES

- Grow For It curriculum resources by 4-H: <http://www.growforit.org/curriculum>
- *Growing Healthy Habits* curriculum: <https://eatsmart.umd.edu/resources/curricula/growing-healthy-habits>
- Cornell Garden-based Learning: <http://gardening.cals.cornell.edu/>
- *Youth Grow Gardens* lesson manual by Growing Gardens: <https://bit.ly/2lmlIBN>
- The Edible Schoolyard Project: <https://edibleschoolyard.org/resource-search>
- Kids Gardening: <https://kidsgardening.org/>
- PBS's Think Garden resource collection: <https://bit.ly/2KnYtiP>
- School Garden Resource from University of GA Extension: <https://bit.ly/2KoXiQ7>
- My First Garden: <https://extension.illinois.edu/firstgarden/index.cfm>
- *Garden Wise: Educating with a Garden* by Project Food, Land & People: <https://bit.ly/2IHjWGs>
- The Food Project toolkit: <http://thefoodproject.org/food-project-toolbox>
- Project Learning Garden Lessons by Captain Planet Foundation: <https://bit.ly/2KksLms>
- *Farm to School Activities in Out-of-School Time* by CANFIT: <https://bit.ly/2Kppjau>
- "Using Gardens as Classrooms" by Kristin Stayer: <https://bit.ly/2jZ3HXh>