



Hydroponic Systems Resource Guide

A handy guide for starting or enhancing your hydroponics project!

This collection of resources will help you design, build, and maintain hydroponic systems in your school, even if you're just starting out or looking to take your project to the next level.

Know of a great resource we're missing? Started a project yourself?

Share it with the N:OW for Net-Zero team: nowfornetzero@fesplanet.org

Key Concepts for Learning Hydroponics

Introduction to Hydroponics

System Design & Infrastructure

Nutrient Solutions & Hydroponic Mixtures

Troubleshooting Common Challenges

Plant Selection & Care

Advanced Techniques

Free Virtual Courses

[Hydroponics STEM Lessons](#)

Over 70 short videos by Green Our Planet covering system setup, nutrient solutions, plant physiology, and classroom components. Be sure to check out their many more exciting offerings below.

- [More lessons](#)

[Megaponics Hydroponics Simplified](#)

A free 9-video course on plant selection, pH calibration, lighting, and nutrient balancing for beginners.

Virtual Workshops

Workshop Title	Link
Introduction to Hydroponics Gardening	Watch here
Introduction to Hydroponics Systems	Watch here
Hydroponics Basics	Watch here
Basic Classroom Hydroponics	Watch here
How to Start Seeds for Hydroponics	Watch here
Inexpensive Projects and Curriculum for Indoor Gardening	Watch here
How School Gardens & Hydroponics Can Change the Food System	Watch here

Top Reading Resources

Comprehensive Curricula and Lesson Plans

Grow with the Flow: A Hydroponic Gardening 10-Week Curriculum for Youth

Structured curriculum for students to explore hydroponic gardening.

Download Curriculum

Exploring Hydroponics and Discovering Through Hydroponics

Classroom guides (K-5) with hands-on activities, setup instructions, and reference materials.

- [Exploring Hydroponics Guide](#)
- [Discovering Hydroponics Guide](#)

Grade-Specific Hydroponics Curricula (NACSS)

Tailored lessons for Grades 1 and 4 on hydroponics.

- [Grade 1 Curriculum](#)
- [Grade 4 Curriculum](#)



Culturally Responsive Hydroponics Curriculum Framework (2021)

Focus on integrating cultural perspectives into hydroponics education.

[View Framework](#)

Classroom Guides for Beginners

Hydroponic Gardens for Classrooms: Your Beginner's Guide

Practical tips for classroom hydroponics and case studies of school programs.

- [Beginner's Guide](#)
- [Basic Principles of Hydroponics](#)

Hydroponics in the Classroom by Farm to Cafeteria Canada

Guide to implementing hydroponics in classrooms.

[View Guide](#)

Farm to Cafeteria Resources Page

Extensive resources for funding, curriculum alignment, and project ideas.

[Visit Resource Page](#)

School Food Gardens' Resources for Educators

Tools and resources to support food gardens in schools.

[View Resources](#)

Project Implementation and DIY Guides

F2SBC: How to Build a Grow Station for Starting Seeds

Step-by-step guide for constructing a grow station.

[Watch the video](#)

REAPS Indoor Growing Guide: Hydroponics & In-soil

Comprehensive guide for indoor hydroponic and soil-based growing.

[Download Guide](#)

The Good Food Machine: A Guide for Teachers and Educators

Resource to support educators in setting up hydroponic projects.

[View Guide](#)

Need Funding?

If you haven't already, be sure to check out our N:OW for Net-Zero Grant [here](#) and our additional funding opportunities [here](#)!

Resource Name	Description	Link
Farm to Cafeteria Canada: Grants and Resources	Offers grants and resources for school food gardens and hydroponic projects.	Visit Resource Centre
Sustainable Canadian Agricultural Partnership (Sustainable CAP)	Funding for innovative agricultural and education projects.	Learn More
TD Friends of the Environment Foundation	Grants for environmental projects, including hydroponics in schools.	Explore Grants
Farm to School Quebec by Equiterre	Supports Quebec schools to implement sustainable food education and procurement initiatives.	Learn More
Ontario Edible Education Network	Collection of healthy food systems grants across the country.	View granting programs

Want to learn about how some of our N:OW for Net-Zero grantees have implemented hydroponic systems into their schools?

Visit <https://nowfornetzero.org/solution-stories/>