

Welcome to the Aquatree® Seed to Salad Project-Based Learning (PBL) experience! This two-week, standards-aligned supplemental curriculum is designed to enrich your classroom with immersive, hands-on learning opportunities. Students will explore hydroponic gardening in order to answer the driving question: **How do the land and weather in our state help plants grow? Can we grow healthy food using just water and nutrients?**

Throughout the PBL, students will nurture the Aquatree® hydroponic garden, gaining practical insights into sustainable agriculture and the science of plant growth. The project culminates in an exciting Seed to Salad Tasting Lab designed, advertised, and hosted by the students themselves.

In order to answer the driving question and prepare their tasting lab, students will explore the following:

**Science:** Students will observe and study plant anatomy, observe the plant life cycle firsthand, and investigate the essential factors for plant growth in a hydroponic system.

**Math:** Students will measure and graph plant growth and analyze data to understand growth patterns.

**Social Studies:** Map skills are incorporated as students explore the different fruits and vegetables grown in their state, and how they are influenced by climate and geography.

**Health:** Students will learn the nutritional benefits of vegetables and encourage fellow students to try new foods in their tasting lab.

**Language Arts:** Students will practice effective communication through written observations, oral presentations, and discussions about their hydroponic gardening experience.

The curriculum includes:

- Two weeks of lesson plans and activity resources
- A printable, student lab book providing formative assessment opportunities
- Access to support videos for setting up and maintaining the garden
- Microgreen seeds
- Nutrients
- Aquatree® Garden

This comprehensive approach allows students to see the interconnectedness of different subjects while promoting critical thinking, problem-solving, and collaboration skills as students work together to maintain their hydroponic garden and apply their knowledge to real-world agricultural challenges.