

Tina Bickel

WBCEF Venture Grant Update

April 25, 2023

Hydroponics in the Gifted Support Classroom



Gifted Support Students at West Branch Experience Hydroponics Gardening in the Classroom

After being awarded grant money, courtesy of the West Branch Community Education Foundation, the Junior High and High School Gifted Support students (grades 5-12) benefited by being able to bring gardening directly into their classroom. The students prepared for the adventure by researching hydroponics gardening- essentially, growing fruits and vegetables with water and liquid nutrients. Many students had heard of the concept, but had doubts that gardening would be possible or successful without the use of soil.

The Junior High and High School students were responsible for every step of the process, including building the hydroponics equipment as it arrived. In total, the grant money purchased 5 different hydroponics setups- two small aerogardens, a tabletop grow tower with LED lighting, a large 3-tiered pipe system, and a hydroponic bucket system with water pump and filtration system. Each group was given the materials and instruction manual to follow the steps in building their equipment correctly.



Once the students had the equipment put together, the real fun began! Planting! The class learned about soaking the seeds to encourage germination, followed by placing each germinated seed into starter coconut coir or sponges, and finally into the grow towers. Students were responsible for charting the daily growth of each plant, checking water levels, and adding appropriate amounts of liquid nutrients.



In mid-March, the Gifted Support students were able to enjoy their hard work by harvesting a large batch of lettuce, grown from seed in their aerogardens! The class used the lettuce to make salads during their Gifted Support class time.



As the school year is winding down, so are the hydroponics gardening projects, due to lack of time for growing and harvesting the items. The class still has four tomato plants that have blossomed, so they're hoping to see a tomato or two before June 2! Next school year, the students are looking forward to growing more items, including herbs and flowers that can be dried and used to make essential oils and other products. The Gifted Support students and teacher, Tina Bickel, are so appreciative of the grant money received from the West Branch Community Education Foundation. It has opened the doors to endless learning opportunities within their classroom!

Additional photographs of the hydroponics gardening materials:

