Thompson Education Foundation
Great Ideas Grant Final Reporting
Urban Agriculture Meets School Cafeterias
Sarah Tomsic, Nutrition Services

Once we received the great news that we had been awarded this grant, I immediately ordered our Flex Farm hydroponic growing tower. Flex Farm also provided a full curriculum, troubleshooting and instructions via a website called Farmative. Once the Farm arrived, I delivered it to the classroom and Hedy took it from there. She and her students chose “farm managers’ and assigned other various jobs related to the planting, growing, and harvesting of the farm. The students assembled the growing tower and followed the instructions for planting. During the first planting, the students experimented with varying levels of light and nutrients and noted the differences that occurred when the plants were in distress. The first harvest produced crisp, green leaves that were a little bitter due to the fluctuations as students experimented. With the first harvest, I made the students a big salad to enjoy in their classroom and we used some of the lettuce for our catering program. The second, and final harvest of this year will be ready the last week of school. The plan is to have an event showcasing the lettuce on the Thompson Valley salad bar to recognize the Ag and FFA students for their hard work. Nutrition Services will purchase the lettuce at market price and that will seed their account for future students to purchase more seed and nutrients as needed, and eventually they may purchase an additional Flex Farm.

The students have achieved what was set out for this project. They have worked in teams to plan, build, harvest, and maintain the hydroponic garden. They have utilized critical thinking and problem solving skills through each step. During the first planting, the students purposefully created stressors for the plants so that they could analyze what was wrong and how to fix it. They utilized principals of chemistry, biology, and math. Additionally, the students have made meaningful connections with the food - planting, growing, harvesting and eating.

Through completing the lessons provided in the Farmative curriculum, students have checked off each skill necessary to grow the farm and troubleshoot problems. They have kept project logs and self reflection journals. Hedy provides plenty of time in her classes for students to collaborate and offer peer feedback. The project will conclude this year with a special recognition in the Thompson Valley Cafeteria where FFA and Ag students will have the opportunity to speak about their Flex Farm experience.

I visited the classroom a few times and during one visit a student said, “I was surprised to find that we could grow this much lettuce using only water, ph, and light. The lettuce is really good and it is clean enough to eat right out of the grow tower.”

This project could easily be replicated in additional classrooms in the Thompson School District. The FFA students at Berthoud High would be the first place another tower would be beneficial. Hydroponic gardening would translate well to our culinary programs, the horticulture classes, and to any classroom where teachers are teaching life cycles or food systems. I think it would

be amazing to have a Flex Farm in every cafeteria with dedicated teams of students planting, growing, and harvesting the lettuce for their salad bars. The Flex Farm is very easy to maintain and takes up a little more space than a filing cabinet.

I want to thank Thompson Education Foundation for granting us the opportunity to start a hydroponic growing “business” at Thompson Valley. This is a project that has been fun and engaging for the students and Hedy is excited to continue the project next year. Nutrition Services is looking forward to purchasing many harvests to come!

Here is the link to the final Fork Farms Hydroponic Garden Budget.