

## Land & Water Challenge

# Lexus Eco Challenge

Teacher Advisor: Mandi Leigh

Team Name: Growing food, Growing community  
Students: Vincent, Taha, Daniella, Jessica, Tiaira,  
Anise, Scarlett, Samuel, & Yamilet

School: Lotus School For Excellence, Aurora,  
Colorado

Principal: Eray Idil



# What is the environmental issue?

Our school is located in a “food desert”, meaning there is no locally produced food in the area. The Lotus School for Excellence also has a diverse student body, we speak 54 different languages. Also, 71% of our students qualify for Free and Reduced Lunch. We recognized that we have a need for fresh food and inexpensive food in our community. This project seeks to meet this need.

We knew after close inspection that the land around our school was not being successfully used. Around May of 2014, students converted the unused space to a garden in order to provide food to students and families thriving off of the school. We came to a conclusion that we should not only just build a garden, but use the garden as a means to teaching our peers about composting, recycling, gardening, and much more. Teaching others about the good part of gardening was our ultimate goal, but now we have much exceeded our goal and successfully grew a great beneficial garden.

# What is your action plan?

Our action plan is to encourage kids and many adults to grow and eat much healthier foods. In today's society many people rely on cheap food to eat, but our goal is to encourage many people to choose the healthier side of everyday food without having to worry *too* much about the costs. Not only have we taught many kids and adults about the healthy habit of growing a garden but we also plan on spreading the word of the benefits of fresh organic produce to many other schools. We also set out to provide inexpensive food options for the students and families in our school community. Finally our action plan consists of inspiring other schools by demonstrating what growing a garden really means and what it can do for you and your community.

Each student is responsible to do *SOMETHING*. The eighth graders that were here last year are responsible to help the kids that came this year. Taha and Samuel were our videographers, Jessica was our website author. - Long story short, we all contributed many things to our Garden!

# How did you implement your ideas?

Our team helped elementary students learn about how to recycle and compost. We got kids to learn that eating healthy is good and that it will help them grow faster. Elementary students are great composters!

We held weekly farm stands to sell vegetables grown in our garden to students and families at a minimal price: Families were filling bags for around \$5. The money we earn will be reinvested in the garden to grow fruit trees and raspberry bushes (we raised \$430! = about 4 apple trees and 5 berry bushes).

Additionally, we encouraged all grades and classes to use the garden in any way they could imagine to compliment teaching curriculum. Classes that used our garden include: Engineering, Yearbook, Art, Life Science, Math, Science of Natural Disasters, Earth Science, and several elementary grades.



# How did you implement your ideas? (Continued)

We held an open house where teachers from other charter schools that found inspiration for building their own gardens. We also explained the process and how our garden works. We used the garden to demonstrate best practices in low water use irrigation systems. We gained ideas for new things to grow in our garden and they inspired us to expand the range of food in our garden.

One member of the APS (Aurora Public Schools) board of directors looked at our garden and helped us with new ideas. She has been on the school board longer than any other member. She was impressed with our garden, our knowledge of the processes, the levels that we had engaged our elementary students in, and the leadership of our group. She will support the growing of gardens at other schools.

# How did you implement your ideas? (Continued)

We created a Youtube video about our garden to promote the event and amazing programs at our school. We hosted an open house so people from other schools could be aware of our garden.

Our team Youtube video's name is: [LSE GARDEN.](#)

Our Website's Name is: [LSE GARDEN LABORATORY.](#)

Our school's promotional video:

[Garden Laboratory](#)

Our Kickstarter page is:

[Lotus School Garden](#)

# How did you implement your ideas? (Continued)

Last year a group of 10 students started the garden project. Some of these students returned to continue the project and make sure the goals were met. 9 students are continuing the garden project by sharing their passion for the garden by educating elementary students as well as other middle school and high school students. Many of these students made sacrifices for the garden, but all were rewarded with the chance to learn new things, to teach other, and improve our community.



Lotus Garden team Spring 2015

# How did you implement your ideas? (Continued)

When we began the project last year, we had a plan to start with our school and then later expand these ideas to other schools around our greater community, but first we had to raise awareness at our school. To do so, we presented at an assembly, made and hung many posters, and had a station at our school's academic fair to promote the idea. We did an online fundraiser to save up for the materials we needed to start and grow our garden. We had succeeded in what we had planned and now we are taking in a step farther so we can win the *Lexus Eco Challenge* and have fresh produce to eat and share.



# Evaluate your plan. What are the results?

We got to teach over 150 elementary students how to compost and recycle. We had an open house to teach the parents and teachers about the garden and what we did to have such a beautiful big garden. There were many questions from those who came and all of them were answered. With success, we shared our results with the parents and teachers that came to see our garden. Many of them were ready and motivated to start a garden just like we have done.

We provided pesticide and herbicide free foods to 8-27 families every week.

We are hosting a big harvest dinner for parents and teachers to come and eat some of our delicious vegetables that we grew in our garden. We hope that all the parents love it and see that we are very proud in what we have done in the past couple of years. Even as the hard times come and go we are still thriving.

# Evaluate your plan. What are some of the results

We would of never had such a big garden if it wasn't for the students of 2014 that worked so hard to get this far. It all started from woodchip digging to the delicious food we have now. Thank you, to the students worked so hard last year, without your help we wouldn't have been where we are now.

One thing that we want to do is get the students and parents to eat healthy and that's what we did. Parents and students are buying and eating healthy foods for just a maximum of \$5 for a bag full of vegetables and fruits.

We also developed a relationship with Project Worth More, a local nonprofit that helps refugees in Aurora and Denver get established in our communities. We are donating a 2-4 cases of food a week.

# What will your team, school, and advisors plan on doing with their winnings?

Our team and our school are planning to use the money to plant more vegetables and fruits for our garden. We plan on donating our winnings to many places that supply people that are in need. We are donating food to Project Worthmore. Project Worthmore is a place where people (like ourselves) can donate money and other essentials in order to help our refugee neighbors and friends. We would also plan on making a greenhouse so we can continue to grow plants as Aurora's harsh winter hits.

# What will your team, school, and advisors plan on doing with their winnings? (Continued)

Saving water is a very large goal in our school. We also have another team participating in the Lexus Eco Challenge that are doing water conservation. We currently use drip irrigation, which is the most efficient way to water here. We would like to continue efficient water use as our garden expands. Using effective strategies and tactics our garden will be beneficial on the long term.

# Project Gallery



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This photo was taken at the Lotus Garden Laboratory's Open House.

Guests include: Teachers from other Charter schools in the Denver area, a representative from the League of Charter School, and an Aurora Public Schools school board member.

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# Project Gallery

In these two photos, students are seen using the garden to practice using dichotomous keys.



# Project Gallery



Happy Elementary Students after a Composting lesson and a Garden tour.